

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

Claims 1-29 (canceled).

30. (Currently Amended) An isolated antibody or antibody fragment which is specific for and binds directly to the ED-B oncofoetal domain of fibronectin (FN).

31. (Previously Presented) An antibody or antibody fragment according to claim 30, which comprises a mammalian antibody-antigen binding domain.

32. (Previously Presented) An antibody or antibody fragment according to claim 31, wherein said antibody-antigen binding domain is of human origin.

33. (Previously Presented) An antibody or antibody fragment according to claim 30, which binds to FN containing ED-B after treatment of the FN with the protease thermolysin.

34. (Previously Presented) An antibody or antibody fragment according to claim 30, which binds directly to the ED-B domain portion of recombinant FN containing type III homology repeats which include the ED-B domain.

35. (Previously Presented) An antibody or antibody fragment according to claim 30, whose binding to B-FN is inhibited by the ED-B domain.

36. (Previously Presented) An antibody or antibody fragment according to claim 30, which binds to B-FN from human, mouse, rat, chicken, and any other species in which the ED-B domain is conserved.

37. (Previously Presented) An antibody or antibody fragment according to claim 30, which binds to B-FN without treatment of the FN with N-glycanase.

38. (Previously Presented) An antibody or antibody fragment according to claim 30, having a variable heavy (VH) chain region of the sequence (aa 1 Glu – aa 98 Arg inclusive in Figure 1) (SEQ ID NO: 9) and the CDR3 sequence Ser Leu Pro Lys (SEQ ID NO: 12).

39. (Previously Presented) An antibody or antibody fragment according to claim 30, having a variable heavy (VH) chain region of the sequence (aa 1 Glu – aa 98 Arg inclusive in Figure 1) (SEQ ID NO.: 9) and the CDR3 sequence Gly Val Gly Ala Phe Arg Pro Tyr Arg Lys His Glu (SEQ ID NO:1).

40. (Previously Presented) An antibody or antibody fragment according to claim 30, having a variable light (VL) chain region of the sequence (aa 1 Ser – aa 90 Ser inclusive in Figure 1) (SEQ ID NO.: 10) and the remainder of the CDR3 sequence as Pro Val Val Leu Asn Gly Val Val (SEQ ID NO: 13).

41. (Previously Presented) An antibody or antibody fragment according to claim 30, having a variable light (VL) chain region of the sequence (aa 1 Ser – aa 90 Ser inclusive in Figure 1) (SEQ ID NO.: 11) and the remainder of the CDR3 sequence as Pro Phe Glu His Asn Leu Val Val (SEQ ID NO: 14).

42. (Previously Presented) An antibody or antibody fragment according to claim 30, having a variable heavy (VH) chain region of the sequence (aa 1 Glu – aa 98 Arg inclusive in Figure 1) (SEQ ID NO.: 9) and the CDR3 sequence.

43. (Currently Amended) An antibody or antibody fragment according to claim 30, which, when measured as a purified monomer, has a dissociation constant ( $K_d$ ) of about  $6 \times 10^{-8}$  M or less for ED-B FN.

44. (Previously Presented) An antibody or antibody fragment according to claim 30, which comprises an scF<sub>v</sub> molecule.

45. (Previously Presented) An antibody or antibody fragment according to claim 30, which comprises a dimeric scF<sub>v</sub> molecule.

46. (Previously Presented) An antibody or antibody fragment according to claim 30, which comprises CGS-1 or CGS-2.

47. (Previously Presented) A pharmaceutical composition comprising an antibody or antibody fragment according to claim 30, in an effective amount for binding thereof to a fibronectin ED-B-containing cell, and a pharmaceutically-acceptable excipient.

Claims 48-52 (canceled).

53. (Previously Presented) A diagnostic kit comprising an antibody or antibody fragment according to claim 30 and one or more reagents that allow the determination of the binding of said antibody or antibody fragment to a cell.

54. (Previously Presented) An antibody or antibody fragment of claim 30, which is isolated from a synthetic molecular library.

55. (Previously Presented) An antibody or antibody fragment of claim 30, which is not naturally occurring.

56. (Canceled)
57. (Previously Presented) An antibody of claim 30.
58. (Previously Presented) An antibody fragment of claim 30.
59. (New) An antibody or antibody fragment of Claim 30 which binds in vivo directly to said ED-B oncofetal domain.
60. (New) An antibody or antibody fragment of Claim 30 which binds in a patient directly to said ED-B oncofetal domain.
61. (New) A pharmaceutical composition for cancer therapy or diagnostics comprising an antibody or antibody fragment according to claim 30, in an effective amount for binding thereof to a fibronectin ED-B-containing cell, and a pharmaceutically-acceptable excipient.